



# MIL-S500 User's Guide

## 5-Port 10/100 Switch



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# User's Guide

## Introduction

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The MIL-S500 Switch provides wire-speed, Fast Ethernet switching function that allows high-performance, low cost connections to full-duplex, half-duplex, 10Mbps and 100Mbps Ethernet network. The MIL-S500 switch provides five auto-sensing 10/100Mbps RJ-45 ports that automatically detects the speed of the device that is plugged into it. This switching function allows 10Mbps, 100Mbps, full-duplex and half-duplex devices to communicate on the same network without having to replace any infrastructure.

## Key Features

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- Compliant with IEEE 802.3 & 802.3u standards
- Auto-negotiation for 10/100Mbps transmission
- Store-and-Forward switching architecture
- Auto-detect of full/half-duplex mode in all ports
- Back-pressure for Half-duplex , Pause frame for Full-duplex
- Plug-and-Play configuration auto addresses learning
- Embedded 1K-entry MAC address table and 1Mega Byte frame buffer
- LED-indicators for power, speed 100Mbps, link/activity
- Space-saving compact size
- Broadcast Storm protection

- MDI/MDIX Auto-recognition (No cross over cable required)
- Magnets provide easy installation in modular office

## Package Contents

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Your package contents should include the following:

- MIL-S500 Switch
- Four rubber feet with adhesive pads

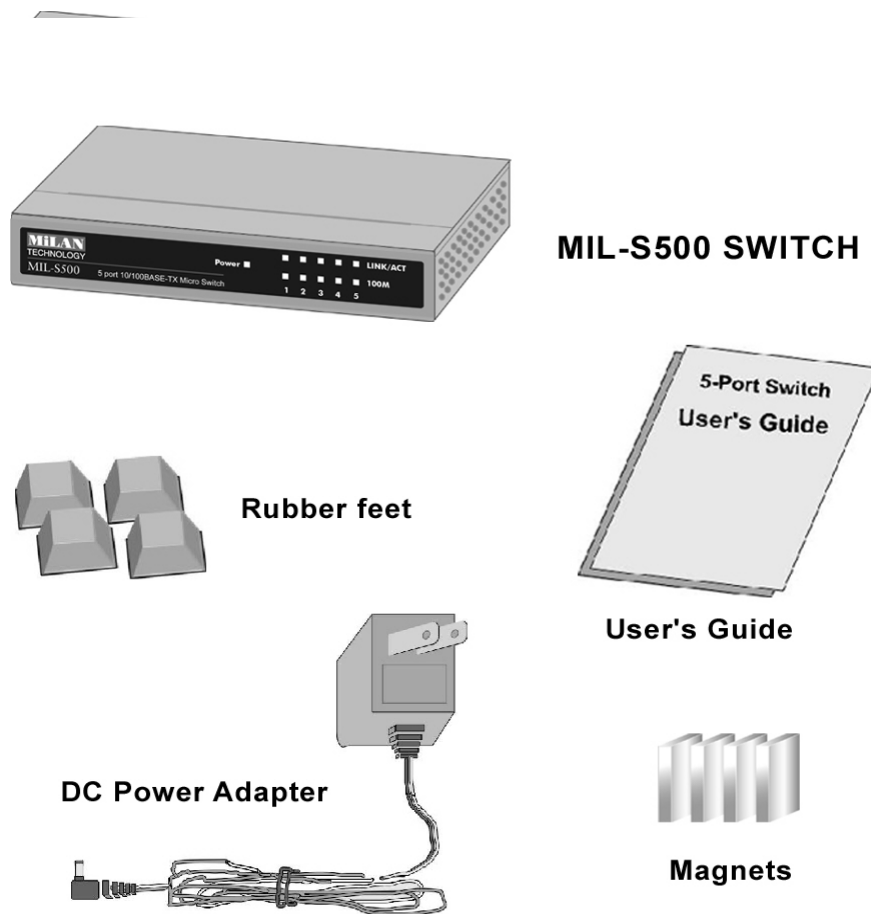


Figure 2. Package Content

If any of these pieces are found missing or damaged, please contact your local dealer or reseller for replacement.

## Hardware Description

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### The Front Panel

The front panel consists of LED Indicators.



Figure 3. Front view of MIL-S500 Switch

### LEDs

Per Device	Power
Per Port	100Mbps ( Link on 100Mbps )
	LINK/ACT ( Link/Activity )

### The Rear Panel

The rear panel of the MIL-S500 Switch has a DC power connector and 5 auto-sensing ports.

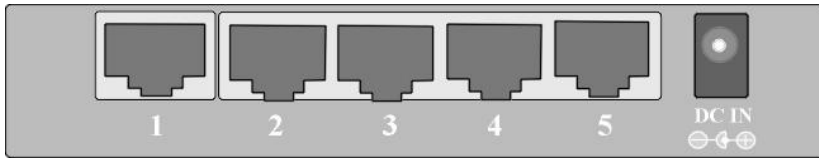


Figure 4. Rear panel view of the MIL-S500 switch

- *Auto-sensing ports for speed and Duplex*  
Five Auto-sensing RJ-45 ports for 10Base-T or 100Base-TX connections.
- *DC Power Connector*  
Plug this connector female end into this device, and the male into a power outlet. Supported input voltages 9 VDC at 700 mA.
- *Auto-sensing for MDI/MDIX*  
No need for crossover

**LED-Indicators** 5

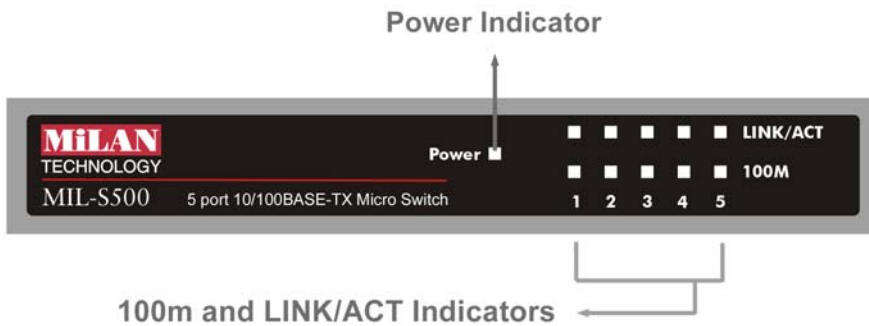


Figure 5. Front panel view of LED indications

The Table lists the LEDs available and their respective function.

LED	Status	Color	Description
Power	On	Green	The hub is supplied with suitable power.
100Mbps	On	Green	The port is connecting with 100Mbps.
	Off		The connection between the hub and the device is 10Mbps, if the LINK/ACT light is on.

LINK/ACT	On	Green	The port is successfully connecting with the device.
	Blinking		The port is receiving or transmitting data.
	Off		The port does not link successfully with the device.

## Installation

- Apply self-adherent rubber feet to the bottom of the Switch near each of the four corners. See Figure 6.
- If applying Switch to metal surface, install magnets as shown in Figure 6. Switch may then be installed on a metal surface.
- Plug in power adapter.

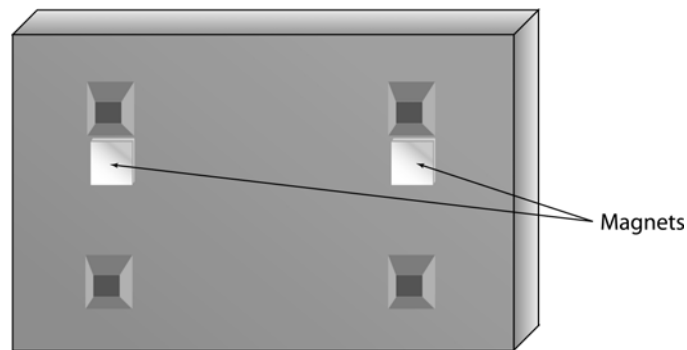


Figure 6. Magnet locations

## Trouble Shooting

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The Switch can be easily monitored through panel indicators that assist in the identification of problems. This section describes common problems you may encounter and where you can find possible solutions.

■ **Power**

If the power indicator does not turn on when the power cord is plugged in, you may have a problem with the power outlet, or power cord. However, if it powers off after running for a while, check for loose power connections, power losses or surges at the power outlet. Or, you may try to unplug the power cord on the Switch, wait for five seconds and then reconnect. If you still cannot resolve the problem, call our technical support hotline.

■ **Cabling**

Verify that the cabling type is correct. Be sure all cable connectors are securely seated in the required ports. Use all standard unshielded twisted-pair (UTP), Category 3, 4, or 5 cables or Category 5 only when connecting with Fast Ethernet. Make sure the maximum distance between the Switch to the workstation, or Switch is 100 meters.

## Product Specification

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### General Specification

Standard Compliance	IEEE 802.3 10Base-T Ethernet IEEE 802.3u & 802.3x 100Base-TX Fast Ethernet
Number of Ports	5X 10/100Mbps Auto-sensing RJ-45 ports
Data Transfer Rate	Ethernet: 10Mbps(half duplex) 20Mbps(full duplex) Fast Ethernet: 100Mbps(half duplex) 200Mbps(full duplex)
Network Cables	Unshielded twisted-pair cable
Topology	Star
LED Indicators Per Device Per Port	Power 100Mbps, LINK/ACT

## Performance Specification

Transmission Method	Store and forward
MAC address table	1K-entry MAC address table
Maximum Forwarding Rate(64byte packets)	14,880 pps /10 BASE-T 148,800 pps /100BASE-TX
Maximum Filtering Rate(64byte packets)	14,880 pps /10BASE-T 148,800 pps/100BASE-TX
Flow control	Pause frame (Full-duplex) Back-pressure (Half-duplex)
Duplex mode	Supports both half-duplex and full-duplex mode

## Physical & Environmental Specification

Power Supply	External power adapter, DC 9V, 700mA
Dimensions	111mm×70mm×20mm (L×W×H)
Temperature	Operating temperature: 0 to 45 (32 to 113) storage temperature: 40 to 70 (-22 to 140)
Humidity	10% to 90% (non-conditioning)
EMI	FCC Class B, CE mark
Safety	UL, cUL





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